Amendments to Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended)   A digital receiver arrangement comprising a tuner/demodulator circuit and analogue-to-digital converting means, and further including means for storing an impulse wavelet representation characteristic of an impulse noise event, <u>wherein the impulse wavelet representation comprises a sequence of data perturbation values,</u> means for determining if an interference impulse is present in a received signal, and means for combining the stored representation of the impulse wavelet with the detected received impulse only if an interference impulse is ~~determine~~ <u>determined</u> to be present in the received signal so as to counteract the effect thereof within the received signal, wherein the means for determining if an impulse arises comprises comparison means for comparing the stored impulse wavelet with a wavelet arising in the received signal.

2.   (Canceled)

3. (Previously Presented)   An arrangement as claimed in claim 1, wherein the comparison means comprises a cross-correlator.

4. (Previously Presented)   An arrangement as claimed in claim 1, wherein the comparison means includes optimal filtering means.

5. (Currently Amended)   An arrangement as claimed in claim 1, wherein the means for ~~introducing~~ <u>combining</u> the stored representation ~~to~~ <u>with</u> the received signal includes subtractor means for subtracting the stored wavelet representation from the incoming impulse wavelet.

6. (Currently Amended)   An arrangement as claimed in claim 1, and including means for determining ~~the likely form~~ <u>an estimate of the shape</u> of <u>the</u> impulse wavelet and for ~~introducing~~ <u>storing</u> such ~~likely form to~~ <u>estimate in</u> the said means for storing an impulse wavelet representation.

7. (Previously Presented)   An arrangement as claimed in claim 6, wherein the estimate of the shape of the impulse wavelet is created by means of a test signal.

8. (Previously Presented)   An arrangement as claimed in claim 1, wherein the means for storing the impulse wavelet is arranged to receive a pre-programmed representation of the wavelet.

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9. (Previously Presented)   An arrangement as claimed in claim 1, and including prediction means for predicting the likely shape of an impulse wavelet for storage within the said means for storing.

10. (Previously Presented)   An arrangement as claimed in claim 1, and including means for scaling the stored impulse wavelet having regard to characteristics of the impulse wavelet within the received signal.

11. (Previously Presented)   An arrangement as claimed in claim 10, wherein the said characteristic comprises at least one of the amplitude and phase of the impulse wavelet within the received signal.

12. (Currently Amended)   A method of receiving a digital signal including the steps of demodulating the a received signal, and conducting an analogue-to-digital conversion of the demodulated signal, and including the further steps of storing an impulse wavelet representation characteristic of an impulse noise event, wherein the impulse wavelet representation comprises a sequence of data perturbation values, determining if an impulse interference event is found within an incoming signal, and combining the said stored wavelet representation with the received impulse interference event only if an interference impulse is determine determined to be present in the received incoming signal so as to counteract the effect thereof, wherein said step of determining includes comparing the stored impulse wavelet representation with a wavelet arising in the received incoming signal.

13. (Canceled)

14. (Previously Presented)   A method as claimed in claim 12 and including the step of subtracting the stored wavelet representation from the received impulse interference event.

15. (Previously Presented)   A method as claimed in claim 12 and including the step of estimating the wavelet representation to be stored.

16. (Currently Amended)   A method as claimed in claim 12, and including the step of scaling the stored wavelet representation responsive to characteristics of the received incoming signal.

17. (New)   A digital receiver arrangement comprising:

a tuner/demodulator circuit;

an analogue-to-digital converter;

a datastore;

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an impulse wavelet learning system, wherein the impulse wavelet learning system comprises instructions for:

> receiving the output of the analogue-to-digital converter;
>
> determining if an interference impulse is present in a received signal;
>
> forming an estimate of a shape of an impulse wavelet within the interference pulse, wherein the estimate of the shape of the impulse wavelet comprises a sequence of data perturbation values; and
>
> storing the estimate of the shape of the impulse wavelet in the datastore;

a detection system, wherein the detection system comprises instructions for:

> receiving the output of the analogue-to-digital converter in response to an incoming signal; and
>
> comparing the output of the analogue-to-digital converter to the stored estimate of the shape of the impulse wavelet and acquiring attributes of the stored estimate of the shape of the impulse wavelet; and

a multiplier, wherein the multiplier comprises instructions for:

> receiving the stored estimate of the shape of the impulse wavelet from the datastore;
>
> receiving attributes of the stored estimate of the shape of the impulse wavelet;
>
> scaling the stored wavelet shape to form a more accurate estimate of the impulse wavelet;
>
> subtracting the estimate of the impulse wavelet from output of the analogue-to-digital converter to produce a modified incoming signal; and
>
> delivering the modified signal to the tuner/demodulator circuit.

18. (New)   An arrangement as claimed in claim 17, wherein the instruction for comparing the output of the analogue-to-digital converter to the stored estimate of the shape of the impulse wavelet and acquiring attributes of the stored estimate of the shape of the impulse wavelet is performed by a cross-correlator.

19. (New)   An arrangement as claimed in claim 17, wherein the instruction for comparing the output of the analogue-to-digital converter to the stored estimate of the shape of the impulse wavelet and acquiring attributes of the stored estimate of the shape of the impulse wavelet is performed by optimal filtering means.

20. (New)   An arrangement as claimed in claim 17, wherein the instruction for subtracting the estimate of the impulse wavelet from output of the analogue-to-digital converter to produce a modified incoming signal is performed by a summing circuit.

21. (New)   An arrangement as claimed in claim 17, wherein instruction for forming an estimate of a shape of an impulse wavelet is performed using a test signal.

22. (New)   An arrangement as claimed in claim 17, wherein the multiplier further comprises instructions for selecting a pre-determined stored estimate of the shape of the impulse wavelet from the datastore.

23. (New)   An arrangement as claimed in claim 17, wherein the attributes of the stored estimate of the shape of the impulse wavelet comprises at least one of the amplitude and phase of the impulse wavelet within the received signal.

24. (New)   A method of receiving a digital signal comprising:

demodulating a received digital signal;

conducting an analogue-to-digital conversion of the received digital signal;

determining if an interference impulse is present in the received digital signal;

forming an estimate of a shape of an impulse wavelet within the interference pulse, wherein the
         estimate of the shape of the impulse wavelet comprises a sequence of data perturbation
         values;

storing the estimate of the shape of the impulse wavelet in the datastore;

demodulating an incoming signal;

conducting an analogue-to-digital conversion of the incoming signal;

comparing the output of the analogue-to-digital converter to the stored estimate of the shape of
         the impulse wavelet and acquiring attributes of the stored estimate of the shape of the
         impulse wavelet;

receiving the stored estimate of the shape of the impulse wavelet from the datastore;

receiving attributes of the stored estimate of the shape of the impulse wavelet;

scaling the stored wavelet shape to form a more accurate estimate of the impulse wavelet;

subtracting the estimate of the impulse wavelet from converted incoming signal to produce a
         modified signal;

delivering the modified signal to a tuner/demodulator circuit.

25. (New)   A method as claimed in claim 24, wherein the attributes of the stored estimate of the shape of the impulse wavelet comprise at least one of an amplitude and a phase of the impulse wavelet within the incoming signal.